
10350R (March 2002)

Superseding

STAR-10350R (June 2001)

RST-10350 (08/00)

GUIDE SPECIFICATION FOR CONSTRUCTION

Specification revised to meet U.S. Army Reserve requirements (June 2001)

SECTION TABLE OF CONTENTS

DIVISION 10 - SPECIALTIES

SECTION 10350R

FLAGPOLES

03/02

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 SUBMITTALS
- 1.3 DELIVERY, STORAGE, AND HANDLING

PART 2 PRODUCTS

- 2.1 POLE MATERIALS
- 2.2 POLE CONFIGURATION
 - 2.2.1 Ground Mounted
- 2.3 COMPONENTS AND ACCESSORIES
 - 2.3.1 Finial Ball
 - 2.3.2 Truck Assembly
 - 2.3.3 Flag
 - 2.3.4 Winch
 - 2.3.5 Winch Box
 - 2.3.6 Halyard
 - 2.3.7 Primer
- 2.4 MOUNTING COMPONENTS
 - 2.4.1 Foundation Tube Sleeve
 - 2.4.2 Pole Base Attachment
 - 2.4.3 Wall Support Assembly
 - 2.4.4 Lighting Ground Rod
 - 2.4.5 Lightning Ground Cable
- 2.5 FINISHES
 - 2.5.1 Metal Surfaces in Contact With Concrete: Asphaltic paint.
 - 2.5.2 Aluminum: Anodized clear satin finish.
 - 2.5.3 Finial: Gold anodized finish.

PART 3 EXECUTION

- 3.1 EXAMINATION
- 3.2 PREPARATION
- 3.3 INSTALLATION
- 3.4 ERECTION TOLERANCES
- 3.5 ADJUSTING

-- End of Section Table of Contents --

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SECTION 10350R

FLAGPOLES

03/02

NOTE: This guide specification covers the requirements for flagpoles. Flagpoles require special approval to be located on a government installation, check with the DPW or Master Planner for requirements. This spec will most often be used when the facility is located off post. This document specifies a flagpole with an internal halyard and hand crank. This guide specification is to be used in the preparation of project specifications. Contact the Louisville District with revisions that are needed to this specification.

RST-10350 is a Louisville District Army Reserve Support Team (RST) guide specification.

PART 1 GENERAL

1.1 REFERENCES

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
(AASHTO)

AASHTO M-36

Corrugated Metal Culvert Pipe.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A53

Pipe, Steel, Black and Hot-Dipped, Zinc
Coated, Welded and Seamless.

ASTM A123

Zinc (Hot Dipped Galvanized) Coatings on
Iron and Steel Products.

ASTM A312

Seamless and Welded Austenitic Stainless
Steel Pipe.

ASTM B221	Aluminum-Alloy Extruded Bar, Rod, Wire, Shape, and Tube.
ASTM B241	Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube.

1.2 SUBMITTALS

NOTE: Submittals must be limited to those necessary for adequate quality control. The importance of an item in the project should be one of the primary factors in determining if a submittal for the item should be required.

Indicate submittal classification in the blank space following the name of the item requiring the submittal by using "G" when the submittal requires Government approval. Submittals not classified as "G" will show on the submittal register as "Information Only". For submittals requiring Government approval, a code of up to three characters should be used following the "G" designation to indicate the approving authority; codes of "RE" for Resident Engineer approval, "ED" for Engineering approval, and "AE" for Architect-Engineer approval are recommended.

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Shop Drawings; FIO

Indicate detailed dimensions, base attachment details, anchor requirements, and imposed loads.

SD-03 Product Data

Product Data; FIO

Provide data on pole, accessories, and configurations.

Operation Data; FIO

Provide operating data for the controller.

Maintenance Data; FIO

Provide lubrication and periodic maintenance requirement schedules.

NOTE: Vendor information that forms part of this guide specification is permissible to use as long as the salient features provide for "or equal" product equivalents are specified. Submittal clauses must be modified to make known that specific vendor information is being specified. If the Contractor chooses to provide the specified vendor's product, the submittal for that item is considered a For Information Only submittal. If the Contractor uses a different "or equal" item, then it will be evaluated against the salient features. Hence, it is considered for Government Approval (G).

Acceptable Manufacturer Products; FIO

Manufacturers products listed in this specification are referenced to establish a standard of quality. When the specific product listed is submitted by the Contractor, that submittal will be considered For Information Only). When an equal to that named in this specification is submitted, it shall be for Government Approval (G). The following manufacturer products are specifically mentioned in this specification:

Flagpole: American Flagpole, FIO
800.368.7171
www.americanflagpole.com

Flagpole: Ewing Flagpoles., Inc.; FIO
2316 Delaware Avenue #283
Buffalo, NY 14216
800.663.7653

Flagpole: Concord Industries, Inc.
4150-A Kellway Circle
P. O. Box 1163
Addison, Texas 75001
800.527.3902
www.flagpoles.com

Flagpole Manufacturer Product submitted as an "or equal"; G [___]

SD-04 Samples

Samples; FIO

Submit two samples 100mm x 100mm 4 x 4 inch in size illustrating pole material, color, and finish.

1.3 DELIVERY, STORAGE, AND HANDLING

Deliver flagpoles and accessories completely identified for installation

procedure. Handle and store flagpoles to prevent damage or soiling.

Spiral wrap flagpole with protective covering and pack in protective shipping tubes or containers.

PART 2 PRODUCTS

2.1 POLE MATERIALS

Aluminum: ASTM B241, 6063 alloy, T6 temper.

2.2 POLE CONFIGURATION

2.2.1 Ground Mounted

Ground set, tapered shaft, internal halyard with winch.

1. Outside Butt Diameter: [150mm6 inches][175mm7inches].
2. Nominal Wall Thickness: [4mm.156 inch][5mm.188 inch].
3. Nominal Height: [9000mm30 ft][12000mm40 feet] measured from nominal ground elevation.

2.3 COMPONENTS AND ACCESSORIES

Designer to make selection.

2.3.1 Finial Ball

Stainless steel, 150mm6 inch diameter.

2.3.2 Truck Assembly

Cast aluminum revolving, stainless steel ball bearings, non-fouling.

2.3.3 Flag

Flag shall be provided by others.

2.3.4 Winch

An internal winch operated by a removable handcrank. The winch contains an automatic brake system to permit locking of the flag in any position.

2.3.5 Winch Box

Aluminum, with built-in hinge and lock assembly, attached to pole with tamper proof screws inside box. Provide two keys to operate the lock.

2.3.6 Halyard

Stainless steel aircraft cable with two chrome plated bronze swivel snaphooks, plastic covered counterweight and beaded sling.

2.3.7 Primer

As recommended by the flagpole manufacturer.

2.4 MOUNTING COMPONENTS

Foundation to be sized based on local conditions.

2.4.1 Foundation Tube Sleeve

AASHTO M-36, corrugated 16 gage steel, galvanized, depth as recommended by the flagpole manufacturer.

2.4.2 Pole Base Attachment

Flush aluminum base with base cover.

2.4.3 Wall Support Assembly

Aluminum; round; one piece assembly, back-plate for through bolting, with stainless steel anchor bolts and cover.

2.4.4 Lighting Ground Rod

305mm12 inch long copper rod, 19mm3/4 inch diameter.

2.4.5 Lightning Ground Cable

Copper No. 6 AWG, soft drawn.

2.5 FINISHES

Selection to be made from manufacturer's standard.

2.5.1 Metal Surfaces in Contact With Concrete: Asphaltic paint.

2.5.2 Aluminum: Anodized clear satin finish.

2.5.3 Finial: Gold anodized finish.

PART 3 EXECUTION

3.1 EXAMINATION

Verify that concrete foundation is ready to receive work and dimensions are as indicated on shop drawings.

3.2 PREPARATION

Coat metal sleeve surfaces below grade and surfaces in contact with dissimilar materials with asphaltic paint.

3.3 INSTALLATION

Install flagpole, base assembly, and fittings in accordance with manufacturer's instructions.

Fill foundation tube sleeve with concrete specified in Section 03300, Structural Cast-In-Place.

Install foundation plate and centering wedges for flagpoles base set in concrete base and fasten.

3.4 ERECTION TOLERANCES

Maximum Variation From Plumb: 25mm 1 inch.

3.5 ADJUSTING

Adjust operating devices so that halyard and flag function smoothly.

---END OF SECTION--